NPDES Permit Number: MAR10D585

Project Name:	**Route 62 Roadway Resurfacing and Reconstruction**
Project Address:	Route 62 Concord, Massachusetts
Project Proponent:	**Town of Concord Public Works/ MHD**
Report Prepared By:	Mary Trudeau, Environmental Consultant
Date of Report/Site Visit:	November 13, 2009

Weather this work week was seasonable with insignificant rainfall during the work week. Heavy precipitation is anticipated over the weekend of November 14, 2009. At the date of my visit on November 13, 2009, it was apparent that work had progressed throughout the week. Work on drainage has continued, with many of the catch basin and manhole structures being uncovered or reset. Curbing work is ongoing, and sidewalk were paved throughout the locus. Driveway aprons are paved, and slopes were being stabilized with screened loam. Construction of the last retaining wall appears to be completed, and the contractor anticipates completion of this phase of the roadwork by the end of November. The following photos show some of the loaming and finish grading ongoing at the date of my visit:

The following photos show two views of the sidewalk work areas located above wetlands on the north side of Route 62. Curbing has been set, and catchbasins uncovered and reset along much of the route. The curbing and sidewalk paving has greatly reduced the unstabilized areas within the locus:

I did have concerns with the condition of the stormwater outfall, located on the north side of Route 62, at station point 23+25. The erosion controls are in poor condition, and the slope above the headwall remains unstable. The following photos show the condition of this area at my most recent site visit. The first photo shows the condition of the erosion controls as viewed from Route 62, and the second photo shows the condition of the unstabilized slope, as viewed from below the outfall:

The contractor should restore the downgradient erosion and sedimentation controls by replacing the torn and damaged silt filter fabric fencing and by replacing the straw wattle with a new wattle or straw bales.

I continue to have some residual concern with the outfall at station point 15+00, on the north side of Route 62. With current pavement grading, the outfall does not appear to be receiving flows from catch basins, but as noted in earlier reports, there has been some historic discharge of sediment to down gradient buffer zone and wetland resource areas. While the accumulations are not significant, the contractor should send a laborer to rake and remove any deposits of material. The following photo shows this area:

As noted in earlier reports, I am concerned with the upcoming detailing of the slope adjacent to either end of the easternmost retaining wall. This wall is located at approximately station point 27+50, on the south side of Route 62. I have spoken with

Alan Visco of EH Perkins Construction and noted that I am concerned that the work should include stone and hand work to stabilize the area at either end of the wall. The contractor should insure, particularly on the eastern end of the wall (left hand photo below) that the materials used to stabilize the slope utilize the erosion controls for support. The toe of the finished slope should be set, and stabilized, at the back side of the retaining wall, and should not encroach onto the down gradient silt fence barrier. At my visit today I noted that the landscapers had “jammed” haybales into the gap between the wall and the natural slope, and I am hoping that they do not intend to loam and seed on top of the hay bales. This area should be rebuilt with stone not old hay. The following photo shows the areas of concern:

I also noted that some tree roots and other earth materials had been placed on top of siltation control fencing to the west of the retaining wall depicted above. This has damaged the silt fence. The following picture shows the area requiring restoration and removal of the materials:

Also noted in earlier reports, Mrs. Sulewski, a condominium owner on Cranberry Lane noted that a tree fall at the south side of Route 62, at approximately station point 25+75 has fallen into and across her yard. Alan Visco and Minot Wood of EHPerkins Construction have determined that the tree fall is within forty feet of the centerline of the road (and is their responsibility) and that it will be cut and removed when the tree cutting crew returns to the site. The following photo shows the tree roots within the job locus:

In summary, the following is a list of tasks that should occur at the end of each work day, and/or after any rain event, as well as those tasks that should be done this week in response to this report:

1. The contractor should rebuild the erosion controls at the headwall below station point 23+25 on the north side of Route 62. This should be done immediately.

2. The contractor should stabilize the slopes adjacent to the headwall at station point 23+25, on the north side of Route 62.
3. The contractor should address the sedimentation that has occurred down gradient of the drainage outfall at station point 15+00. Raking and hand work is the appropriate remediation.
4. The contractor should consider the slope treatment of either end of the retaining wall at station point 27+00, on the southern shoulder of Route 62, and should plan on hand work in the more sensitive areas.
5. The contractor should remove the debris from the silt fence to the west of station point 27+00. Silt fence should be repaired.
6. The contractor should remove the tree fall at station point 25+75. It should be cut and removed from the site.
7. There is also a little pile of slash on the south side of the erosion controls at station point 28+25 (south side of Route 62) that should be pulled and disposed of off site. This was left by the tree cutters in the initial clearing of the site.
8. In general, pavement adjacent to catch basins should be swept or shoveled to remove excess sediment deposits from the perimeter of the catch basins.
9. Excess sediment should be swept from the pavement in areas where sediment has been deposited during the work day. Brooms and hand shovels should be on site every day.
10. If there has been a rain event, the contractor should walk the length of the erosion and siltation control barrier and make necessary repairs, including the removal of sediment deposits from the erosion controls. A hand shovel and staple gun should be onsite to make these repairs.
11. In areas where work is located in close proximity to the erosion controls, the contractor shall make sure that any loose sediment, branches or debris that maybe piled against the straw wattles and silt fence is removed.

As noted in past weeks reports, the rough sequence of activities is roughly as follows:

1. repair and maintenance of the required erosion and siltation control barriers (ONGOING);
2. installation of signage and staging of the project (ONGOING);
3. survey work to establish the limits of the project (COMPLETED);
4. clearing and grubbing within the limit of work line (LARGELY COMPLETED);
5. construction of the various retaining walls along the roadway (ONGOING);
6. removal and replacement or improvement of drainage structures and outfalls (ONGOING);
7. roadway reconstruction and resurfacing between the Assabet River at the Maynard Town Line to approximately Water Street, to the east (Binder Paving completed through locus).

Based on my site inspections this week, it is my professional opinion that with the repairs requested or noted above, the project will be in compliance with, both, the NPDES permit and the Order of Conditions issued by the Concord Natural Resources Commission.

Mary Trudeau, Wetlands Consultant
November 14, 2009